

Chapter X

Impediments to the Successful Implementation of ICT

For many organizations, the implementation of a new information system (IS) may be the biggest capital expenditure they undertake. If substantial amounts of capital are committed to these developments it follows that every effort is needed to ensure that they are successful for the overall well being of the organization (Maguire & Redman 2007).

A considerable amount of disruption can occur when an information system (IS) is introduced. There is a possibility that the IS may also be dysfunctional to the organization for several years after the system has gone 'live'. (Maguire 2004).

There is the thorny issue of how you are going to make sure that your staff are capable of realising the benefits from ICT. You should have a clear idea of what strategies you can adopt with regard to training, who in your company decides on training and where training resources are employed with respect to your overall strategy (Computer Weekly 2007).

INTRODUCTION

One of the main criticisms levelled against information systems (IS) in organizations is that they are inflexible. Even minor changes in the environment can make some systems redundant. Most change is inevitable but that should not stop organizations putting in place contingency plans to try and counteract the worst effects of any change. Whenever possible IS should be developed from the standpoint that some change is inevitable.

Many systems projects would be successful if the environment for which they had been developed had not changed over time. Most organizations are finding themselves in competitive, changing environments. This situation is often accentuated when the organization is unable to react quickly to changes in the business environment. Many organizations have been operating in an increasingly turbulent environment over the last 20 years. Change is no longer the exception but the rule. Changing organizational structures and staff groupings have led to a need for greater flexibility.

A number of organizations have undertaken the implementation of ambitious information and communications technology (ICT) strategies. There are so many diverse situations in place that any new IS will be complex. Your organization will probably have a whole collection of legacy systems in place. When you develop a new system do you link it to these systems or do you scrap your existing systems?

Increasing numbers of organizations are implementing enterprise-wide information systems. All the different modules are dependent on each other for success. This need for 'totally' integrated IS requires many different groups working together to develop new systems. This often means groups of staff communicating together for the first time. Generally enterprise-wide information system developments are major undertakings for organizations. They will take up significant resources over a long period of time. Firms may need to have a significant internal information systems resource capability before they undertake such a major change process (Karimi et al. 2007).

Each staff grouping has its own aims and objectives as well as a defined set of priorities. They will each have their own special information requirements. The ICT that is implemented is also changing rapidly. Different firms may decide on different technology platforms. What is at the 'frontier of new technology' in 2005 can be redundant the following year.

It is within this dynamic, turbulent, and complex environment that many organizations have attempted to undertake major system changes. Most of the system development and project management methodologies that are being used have only proved themselves in static environments. The larger and more complex the system development - the longer the project takes. The longer the project takes the

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